



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/609,881	07/05/2000	William H. Zebuhr	105019-0006	5249

25181 7590 04/07/2004

FOLEY HOAG, LLP  
PATENT GROUP, WORLD TRADE CENTER WEST  
155 SEAPORT BLVD  
BOSTON, MA 02110

EXAMINER

MANOHARAN, VIRGINIA

ART UNIT PAPER NUMBER

1764

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/609,881

Applicant(s)

ZEBUHR, WILLIAM H.

Examiner

Virginia Manoharan

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-12, 16-23 and 26-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-12, 16-23 and 26-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Applicant's election with traverse of Group I , claims 4-12, 16-23 and 26-35 in Paper No. 16 is acknowledged. The traversal is on the ground(s) that "search of the claims of one group would necessarily include a search of the claims of the other group so examination of all claims would not burden the Examiner unduly." This is not found persuasive because classes 202 and 203 , for examples, are mandatory searches for the group I invention requiring evaporation and condensation, however, they need not be searched for the group II invention which is directed to a method of fabricating a heat exchanger plate, and vice versa. The requirement is still deemed proper and is therefore made FINAL.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors, e.g., typographical, grammar, idiomatic, syntax and etc. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claims 16-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a). The preamble of claim 16 recites " A heat exchanger", however, the body of the claim recites a distillation system including an evaporator and condenser. A heat exchanger is a distinct device from a distillation system. The former is either an

Art Unit: 1764

evaporator or a condenser, unlike the latter which is comprised of both the evaporator and condenser.

b). Claim 17 is an incomplete claim as it depends on a cancelled claim, i.e., claim 15.

c). Claim 16, fifth line from the bottom, recites the limitation "the distiller". There is insufficient antecedent basis for this limitation since --a distiller-- is not initially recited as structure in the claim.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 4-12, 16-23 & 26-35 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 & 12-20 of copending Application No. 10/051,901. Although the conflicting claims are not identical, they are not patentably distinct from each other because the structural elements in the instant claim are covered in the claims of the above copending application and vice versa. The difference seen is that, claim 1 of the above copending application recites that the " evaporating chambers are closed at their outer edges and open at their inner edges... The condensing chamber are open at their outer

Art Unit: 1764

edges, are closed at their inner edges..."; whereas, the instant claim recites that "the evaporating chambers are sealed at their inner edges and are open at their outer edges. Condensing chambers are open at their inner edges and are sealed at their outer edges." This difference is deemed not to constitute a patentable distinction, but is seen merely as a matter of reversing, shifting and/or relocating one part over the other, an obvious variation(s) that is within the purview of an artisan.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 4-12, 16-23 & 26-28 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-5 & 12-20 of copending Application No. 10/051,901. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: an apparatus which is comprised in combination of a housing; a motor for supplying rotary power within the housing; a compressor having a compressor inlet for receiving a vapor generated within the housing and a compressor outlet for returning compressed vapor to the housing; a heat exchanger plate disposed within the housing and operatively coupled to the motor for rotation about an axis, the heat exchanger plate having a plurality of folds and two opposing edges that are joined together so as to give the folded plate a generally

Art Unit: 1764

circular shape; plurality of spaced-apart panels having corresponding surfaces that define alternating evaporating and condensing chambers between opposing panel surfaces: A first end plate and a second end plate disposed within the housing substantially perpendicular to the axis of rotation, the folded heat exchanger plate mounted between the first and second end plates so as to seal the evaporating chambers from the condensing chambers. Wherein the housing includes a lower portion defining a sump containing the liquid to be distilled; and at least one rotary scoop tube coupled to the second end plate and extending into the sump.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claims 4-12, 16-23 & 26-35 are allowable over the prior art of record.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) Thomas discloses a corrugated heat exchange member for evaporation and condensation.

(b) Ramm-Schmidt et al discloses a heat exchanges with horizontal folds.

(c) Olrik discloses a distilling apparatus comprising an evaporation chamber and a condensing chamber.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is (571)

Application/Control Number: 09/609,881

Art Unit: 1764

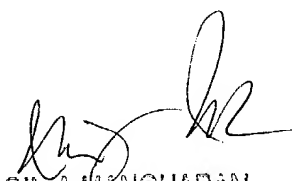
272-1450. The examiner can normally be reached on Tuesday-Friday from 7:30a.m to 6:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9311.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manoharan/tgd

March 10, 2004

  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
ART UNIT 1764 / *Man*